

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :				MRB (QS1042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval	
Description Work Order Deviation				Disposition					
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐							
		OTHER : ☐							

Work Order ID 140955

January 26, 2016 11:18:28 AM

140955

Page 2

Item ID: 646.4001 Accept ***N900040100*** Setup Start ***NS1***
 Revision ID: Stop ***NS2***
 Item Name: AS350 Cable Cutter System
 Start Date: 1/26/2016 Start Qty: 1.00 ***1*** Cust Item ID:
 Required Date: 3/7/2016 Req'd Qty: 1.00 ***1*** Customer:
 Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
130		0.00							
130	Packaging								
Packaging	Memo	0.00							
Packaging	Identify and pack for shipping as per PPP 646.4001								
	Location: _____								
140	QC21- Final Inspection - Work Order Release	0.00							
140									
QC	Memo	0.00							
Quality Control									

Shut
MAR 30 2016

Sold

16/03/30

MF
16-3-30

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :				MRB (QSI042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval	
Description Work Order Deviation				Disposition					

Root Cause				FAULT CATEGORY			
Environment ☐	☐	No Re-verification ☐	☐	Pressure/Forced ☐	☐	Temperature/Cure ☐	☐
Design ☐	☐	Operator ☐	☐	Bending ☐	☐	Set-up ☐	☐
Doc/Data ☐	☐	Offset/Setup ☐	☐	Centre Not Concentric ☐	☐	BOM/Route ☐	☐
Equip/Tooling ☐	☐	Supplier ☐	☐	Cracks ☐	☐	Broken/Damage/Defect ☐	☐
Handling/Pre ☐	☐	Training ☐	☐	Crimp/Kink/Ripple/Wave ☐	☐	Inspection Incomplete/Unqualified ☐	☐
Material ☐	☐	Use for Testing ☐	☐	Cuffs ☐	☐	Contamination ☐	☐
Internal Transport ☐	☐	Poor Information ☐	☐	Crushing ☐	☐	Countersink ☐	☐
Tribal Knowledge ☐	☐	Rushing ☐	☐	Heat Treat ☐	☐	Cut Too Short ☐	☐
LOA ☐	☐	Product Improvement ☐	☐	Wave/Twist in Tube ☐	☐	Instructions Incomplete/Unclear ☐	☐
Substation ☐	☐	Process Improvement ☐	☐	Marks/Chatter ☐	☐	Drill Holes ☐	☐
Past Expiry Date ☐	☐	Manufacturing Process ☐	☐	OTHER : _____			
Misidentified ☐	☐	Past Due ☐	☐				

Picklist Print

January 26, 2016 11:18:33 AM

Page 1

Work Order ID: 140955

140955

Parent Item: 646.4001

646 4001

Parent Item Name: AS350 Cable Cutter System

Start Date: 1/26/2016

Required Date: 3/7/2016

Start Qty: 1.00

Required Qty: 1.00

Comments:

IPP REV:A 12.10.23 NEW ISSUE DD VERF:JLM
IPP REV:B 15.01.08 AS PER DWG REV.B DD VERF:JLM IPP
REV:C 16.01.07 AS PER DWG REV.C DD VERF:JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
646.3301 *646 3301* Upper Cutter Assy Smb		Manufactured	No			110	Each	4.0000	1	1			
				<u>Location</u>				<u>Loc Qty</u>		<u>Loc Code</u>			
				cck018				4					
				136497				2					
				140115				2					
646.3001 *646 3001* Lower Cutter Assy 27 9-89		Manufactured	No			110	Each	0.0000	1	1			
646.2910 *646 2910* Deflector DAS 27 9-89		Manufactured	No			110	Each	2.0000	1	1			
				<u>Location</u>				<u>Loc Qty</u>		<u>Loc Code</u>			
				CCK050				2					
				136136				2					
646.3810 *646 3810* Bracket 27 9-89		Manufactured	No			110	Each	0.0000	2	2			
646.3510 *646 3510* Strut 27 9-89		Manufactured	No			110	Each	0.0000	1	1			
646.3511 *646 3511* Strut DAS 27 9-89		Manufactured	No			110	Each	0.0000	1	1			

DAS
6
9-89

26, 2016 11:18:33 AM

Work Order ID: 140955

Parent Item: 646.4001

Parent Item Name: AS350 Cable Cutter System

140955
646 4001

Start Date: 1/26/2016

Required Date: 3/7/2016

Start Qty: 1.00

Required Qty: 1.00

647.0112 Manufactured No

110 Each 55.0000

2 2

DAS
6
9-89

647 0112

Strut Bracket

**

mf

DAS
27
9-89

647.7703

Manufactured No

110 Each 8.0000

2 2

DAS
6
9-89

647 7703

Strut Assembly

**

140780

mf

Location

Loc Qty

Loc Code

CCK107

55

M130388

55

Location

Loc Qty

Loc Code

CCK114

8

139295

8

NAS1149F0332P

Purchased No

110 Each 2,571.000

138 138

DAS
6
9-89

NAS1149F0332P

Washer

**

134134

mf

Location

Loc Qty

Loc Code

GA

396

m133709

396

ST260a

1500

m134055

1500

ST262

675

m133709

4

m133938

671

DAS
6
9-89

DAS
27
9-89

FEB 29 2016

mf

124555

DAS
27
9-89

Picklist Print

January 26, 2016 11:18:33 AM

Page 3

Work Order ID: 140955

140955

Parent Item: 646.4001

646 4001

Parent Item Name: AS350 Cable Cutter System

Start Date: 1/26/2016

Required Date: 3/7/2016

Start Qty: 1.00

Required Qty: 1.00

MS2104213

Purchased

No

110

Each

2,723.000

61

61

MS210421 3

Nut

**

ms

DAS
6
9-89

Location

Loc Qty

Loc Code

CCK007

2000

m134039

2000

FP001

163

m133790

163

GA

195

m133790

195

ST304

365

m133790

365

61

FEB 29 2016

646.3110

Manufactured

No

110

Each

2.0000

1

1

646.3110

Channel

**

14011

DAS
6
9-89

Location

Loc Qty

Loc Code

cck020

2

136492

2

646.3710

Manufactured

No

110

Each

9.0000

1

1

646.3710

Doubler

**

140753

DAS
6
9-89

Location

Loc Qty

Loc Code

CCK002

9

127550

9

646.3210

Manufactured

No

110

Each

4.0000

1

1

646.3210

Support

**

141064

DAS
6
9-89

Location

Loc Qty

Loc Code

cck020

4

136217

4

ms

MAR 08 2016

January 26, 2016 11:18:33 AM

Shop Packet Print

Page 3

Picklist Print

January 26, 2016 11:18:34 AM

Page 4

Work Order ID: 140955

Parent Item: 646.4001

Parent Item Name: AS350 Cable Cutter System

140955

646 4001

Start Date: 1/26/2016

Required Date: 3/7/2016

Start Qty: 1.00

Required Qty: 1.00

646.3713
646.3713

Gusset

Manufactured No

110 Each

12.0000

**

DAS
6
9-89

ME

DAS
27
9-89
MS24694-S51

MS24694-S51

Screw

Purchased No

110 Each

231.0000

**

DAS
6
9-89

ME

DAS
27
9-89

AN3-13A
AN3-13A

Bolt

Purchased No

110 Each

36.0000

**

DAS
6
FEB 29 2016

ME

DAS
27
9-89

Location

cck105

138216

Loc Qty

12

12

Loc Code

Location

ST284

m130928

m133990

Loc Qty

231

31

200

Loc Code

Location

CA

m129682

GA

m127070

ST349

m131305

Loc Qty

3

3

20

20

13

13

Loc Code

Picklist Print

January 26, 2016 11:18:34 AM

Page 5

Work Order ID: 140955

Parent Item: 646.4001

Parent Item Name: AS350 Cable Cutter System

140955

646 4001

Start Date: 1/26/2016

Required Date: 3/7/2016

Start Qty: 1.00

Required Qty: 1.00

AN3-4A	Purchased	No	110	Each	332.0000	10	10	DAS 6 9-89
AN3-4A Bolt								

**

Location	Loc Qty	Loc Code
over003	250	
m133990	250	
ST350	82	
m129682	10	
m133694	72	

TO *mk*

CR3213-5-3	Purchased	No	110	Each	116.0000	14	14	DAS 6 9-89
CR3213-5-3 Cherry Rivet								

**

Location	Loc Qty	Loc Code
ST319	116	
m130388	16	
m132763	100	

14 *mk*

MS20470AD5-5.5	Purchased	No	110	Each	1,070.000	8	8	DAS 6 9-89
MS20470AD5-5.5 Rivet								

**

Location	Loc Qty	Loc Code
ST309	1070	
123425	79	
m134063	991	

7 *mk*
FFD

646.3711	Manufactured	No	110	Each	20.0000	1	1	DAS 6 9-89
646 3711 Clip								

**

Location	Loc Qty	Loc Code
cck105	20	
120626	20	

mk

January 26, 2016 11:18:34 AM

Shop Packet Print

Page 5

Picklist Print

January 26, 2016 11:18:34 AM

Page 6

Work Order ID: 140955

Parent Item: 646.4001

Parent Item Name: AS350 Cable Cutter System

140955

646 4001

Start Date: 1/26/2016

Required Date: 3/7/2016

Start Qty: 1.00

Required Qty: 1.00

646.3712
6463712

Clip

Manufactured No

110 Each

10.0000

**

1

DAS
6
9-89

Location

Loc Qty

Loc Code

cck105

10

120630

10

110 Each

6.0000

**

1

DAS
6
9-89

646.3811
6463811

Radius Block

Manufactured No

Location

Loc Qty

Loc Code

CCK106

6

122938

6

110 Each

402.0000

**

2

DAS
6
9-89

AN3-6A
AN3-6A

Bolt

Purchased No

Location

Loc Qty

Loc Code

over003

300

M133932

125

M134055

175

ST306

2

M131305

2

ST349

100

M133561

100

110 Each

129.0000

**

3

DAS
6
9-89

MS24694-S55
MS24694-S55

Screw

Purchased No

Location

Loc Qty

Loc Code

ST283

129

m132803

46

m133988

83

DAS
27
9-89

FEB 29 2016

January 26, 2016 11:18:34 AM

Shop Packet Print

Page 6

Picklist Print

January 26, 2016 11:18:34 AM

Page 7

Work Order ID: 140955

140955

Parent Item: 646.4001

646 4001

Parent Item Name: AS350 Cable Cutter System

Start Date: 1/26/2016

Required Date: 3/7/2016

Start Qty: 1.00

Required Qty: 1.00

646.3610 Manufactured No

110 Each 0.0000

646.3610

Filler

646.3714 Manufactured No

110 Each 2.0000

646.3714

Gusset

Location

Loc Qty

Loc Code

cck105

2

120632

2

MS20470AD5-6 Purchased No

110 Each 960.0000

MS20470AD5-6

RIVET

Location

Loc Qty

Loc Code

CCK004

890

124089

890

ST309

70

105433

70

646.3812 Manufactured No

110 Each 0.0000

646.3812

Gusset Bracket

AN3-3A Purchased No

110 Each 267.0000

AN3-3A

Bolt

Location

Loc Qty

Loc Code

ST350

267

m131624

101

m133833

66

m134034

100

**

**

**

**

**

DAS
6
9-89

DAS
6
9-89

DAS
6
9-89

DAS
6
9-89

DAS
6
9-89

FEB 29 2016

Picklist Print

January 26, 2016 11:18:34 AM

Page 8

Work Order ID: 140955

140955

Parent Item: 646.4001

646 4001

Parent Item Name: AS350 Cable Cutter System

Start Date: 1/26/2016

Required Date: 3/7/2016

Start Qty: 1.00

Required Qty: 1.00

646.3813	Manufactured	No	110	Each	5.0000	1	1
----------	--------------	----	-----	------	--------	---	---

646 3813

Strut Bracket

**

DAS 140119

9-89

Location

Loc Qty

Loc Code

CCK106

5

127453

1

138267

4

MS20470AD5-7

Purchased

No

110

Each

506.0000

3

3

MS20470AD5-7

Rivet

**

DAS

6

9-89

Location

Loc Qty

Loc Code

ST309

506

123425

506

MS21047-3

Purchased

No

110

Each

225.0000

18

18

MS21047-3

Nut Plate

**

DAS

6

9-89

Location

Loc Qty

Loc Code

ST301

225

m133790

25

m133938

100

m134055

100

CCR264SS3-02

Purchased

No

110

Each

352.0000

36

36

CCR264SS3-02

Rivet, Cherry

**

FEB 29 2016

Location

Loc Qty

Loc Code

ST321

352

M133790

152

M134023

200

DAS

6

9-89

January 26, 2016 11:18:34 AM

Shop Packet Print

Page 8

Picklist Print

January 26, 2016 11:18:34 AM

Page 9

Work Order ID: 140955

140955

Parent Item: 646.4001

646 4001

Parent Item Name: AS350 Cable Cutter System

Start Date: 1/26/2016

Required Date: 3/7/2016

Start Qty: 1.00

Required Qty: 1.00

AN3-5A Purchased No

110 Each 222.0000 2 2

AN3-5A

Bolt

★★

DAS
6
9-89

Location

Loc Qty

Loc Code

FP001

24

m133686

24

ST350

198

m133686

78

m134055

120

646.3715 Manufactured No

110 Each 17.0000 2 2

646 3715

Strut Doubler

★★

DAS
6
9-89

Location

Loc Qty

Loc Code

cck105

17

139892

17

MS27039-1-12 Purchased No

110 Each 185.0000 6 6

MS27039-1-12

Screw

★★

DAS
6
9-89

Location

Loc Qty

Loc Code

over006

100

m133988

100

ST280

85

m133483

85

646.3716 Manufactured No

110 Each 6.0000 1 1

646 3716

Gauge Bracket

★★

DAS
6
9-89

Location

Loc Qty

Loc Code

cck105

6

136410

6

January 26, 2016 11:18:34 AM

Shop Packet Print

Page 9

Picklist Print

January 26, 2016 11:18:34 AM

Page 10

Work Order ID: 140955

140955

Parent Item: 646.4001

646 4001

Parent Item Name: AS350 Cable Cutter System

Start Date: 1/26/2016

Required Date: 3/7/2016

Start Qty: 1.00

Required Qty: 1.00

MS20426AD5-7

Purchased

No

110

Each

1,057.000

2

2

MS20426AD5-7

RIVET

**

DAS
6
9-89

Location

Loc Qty

Loc Code

ST311

1057

M132767

14

M133922

1043

MS24694-S54

Purchased

No

110

Each

156.0000

2

2

MS24694-S54

SCREW

**

DAS
6
9-89

Location

Loc Qty

Loc Code

ST284

156

m133134

56

m134063

100

MS27039-1-21

Purchased

No

110

Each

371.0000

4

4

MS27039-1-21

Screw

**

DAS
6
9-89

Location

Loc Qty

Loc Code

over006

241

m127904

241

ST280

130

m127904

130

MS27039-1-20

Purchased

No

110

Each

170.0000

2

2

MS27039-1-20

Screw

**

DAS
6
9-89

Location

Loc Qty

Loc Code

ST280

170

124326

170

FEB 29 2016

Picklist Print

January 26, 2016 11:18:34 AM

Work Order ID: 140955

140955

Parent Item: 646.4001

646 4001

Parent Item Name: AS350 Cable Cutter System

Start Date: 1/26/2016

Required Date: 3/7/2016

Start Qty: 1.00

Required Qty: 1.00

MS27039-1-19

Purchased No

110 Each

333.0000

22

22

MS27039-1-19

Screw

**

DAS

6

9-89

Location

Loc Qty

Loc Code

over006

250

m133932

100

m134055

150

ST280

83

m133938

83

646.3717

Manufactured No

110 Each

1.0000

0

1

6463717

Doubler

**

DAS

6

9-89

Location

Loc Qty

Loc Code

cck105

1

120633

1

646.3718

Manufactured No

110 Each

11.0000

2

2

6463718

Custom Washer

**

DAS

6

9-89

Location

Loc Qty

Loc Code

cck105

11

136223

11

646.3719

Manufactured No

110 Each

17.0000

2

2

6463719

Doubler

**

DAS

6

9-89

Location

Loc Qty

Loc Code

cck105

17

139893

17

Picklist Print

January 26, 2016 11:18:34 AM

Page 12

Work Order ID: 140955

Parent Item: 646.4001

Parent Item Name: AS350 Cable Cutter System

140955

646 4001

Start Date: 1/26/2016

Required Date: 3/7/2016

Start Qty: 1.00

Required Qty: 1.00

MS27039-1-10

Purchased

No

110

Each

146.0000

2

2

MS27039-1-10

SCREW

**

134164

DAS

6

9-89

Location

Loc Qty

Loc Code

CA

41

m128635

41

GA

50

m129541

50

ST280

55

m132677

55

AN3-11A

Purchased

No

110

Each

173.0000

10

10

AN3-11A

Bolt

**

DAS

6

9-89

Location

Loc Qty

Loc Code

over003

100

m133992

100

ST349

73

m133561

73

600.0990

Purchased

No

110

Each

23.0000

1

1

6000990

Magnabond 6398 Part A

**

DAS

6

9-89

Location

Loc Qty

Loc Code

CA2

12

M133800

12

PKG

11

M133938

11

January 26, 2016 11:18:34 AM

Shop Packet Print

Page 12

Picklist Print

January 26, 2016 11:18:34 AM

Page 13

Work Order ID: 140955

140955

Parent Item: 646.4001

646 4001

Parent Item Name: AS350 Cable Cutter System

Start Date: 1/26/2016

Required Date: 3/7/2016

Start Qty: 1.00

Required Qty: 1.00

600.0991

Purchased

No

110

Each

23.0000

1

1

6000991

MAGNOBOND 6398 PART B

**

DAS

6

9-89

Location

Loc Qty

Loc Code

CA2

12

m133800

12

PKG

11

m133938

11

600.1012

Purchased

No

110

Each

23.0000

1

1

6001012

Sealant PR1425B2 (#654 sem)

**

Location

Loc Qty

Loc Code

cck017

22

m133800

6

m133938

8

m133992

8

cck018

1

m131364

1

10/30/2015

600.0129

Purchased

No

110

f

493.0000

8

8

6000129

VHB TAPE 75935A651

**

DAS

6

9-89

Location

Loc Qty

Loc Code

CCK095

493

m127920

293

m131311

200

600.1013

Purchased

No

110

Each

845.0000

5

5

6001013

021200-3M TAPE PRIMER 94 PRIMER 24216

**

Location

Loc Qty

Loc Code

CCK095

845

m131145

845

6/15/2016

DAS

6

9-89

DAS

January 26, 2016 11:18:34 AM

Shop Packet Print

Page 13

Picklist Print

Page 15

January 26, 2016 11:18:35 AM

Work Order ID: 140955

140955

Parent Item: 646.4001

646 4001

Parent Item Name: AS350 Cable Cutter System

Start Date: 1/26/2016

Required Date: 3/7/2016

Start Qty: 1.00

Required Qty: 1.00

AN3-12A Purchased No

110 Each 85.0000 2 2

AN3-12A

Bolt

**

DAS
6
9-89

Location

Loc Qty

Loc Code

GA

2

m129682

2

ST349

83

m133064

16

m133234

67

MS27039-1-16

Purchased No

110 Each 294.0000 24 24

MS27039-1-16

Screw

**

DAS
6
9-89

Location

Loc Qty

Loc Code

ST280

294

m131317

8

mm134023

286

650.9201

Manufactured No

110 Each 11.0000 2 2

650.9201

Eyelet Bracket Assembly

**

DAS
6
9-89

Location

Loc Qty

Loc Code

cck127

11

136606

11

AN44-5A

Purchased No

110 Each 24.0000 2 2

AN44-5A

Eyebolt

**

DAS
6
9-89

Location

Loc Qty

Loc Code

ST339

24

m133790

12

m133990

12

FEB 09 2016

Picklist Print

January 26, 2016 11:18:35 AM

Page 16

Work Order ID: 140955

Parent Item: 646.4001

Parent Item Name: AS350 Cable Cutter System

140955

646 4001

Start Date: 1/26/2016

Required Date: 3/7/2016

Start Qty: 1.00

Required Qty: 1.00

AN665-34R

Purchased

No

110

Each

46.0000

2

2

AN665-34R

Clevis

Location

Loc Qty

Loc Code

ST330

46

M133523

26

M134029

10

st330

10

AN4C7A

Purchased

No

110

Each

104.0000

2

2

AN4C7A

BOLT

Location

Loc Qty

Loc Code

OVER002

20

m133523

20

ST340

14

m133363

14

ST345

70

m133790

20

m133990

50

NAS1149F0432P

Purchased

No

110

Each

1,588.000

4

4

NAS1149F0432P

WASHER

Location

Loc Qty

Loc Code

ST260a

1000

M133990

1000

ST262

463

M133938

463

st268

125

M132677

125

DAS
27
9-89

FEB 09 2016

DAS
6
9-89

Picklist Print

January 26, 2016 11:18:35 AM

Page 17

Work Order ID: 140955

Parent Item: 646.4001

Parent Item Name: AS350 Cable Cutter System

140955

646 4001

Start Date: 1/26/2016

Required Date: 3/7/2016

Start Qty: 1.00

Required Qty: 1.00

MS21042L4

Purchased

No

110

Each

3,610.000

2

2

MS21042L4

Locknut

**

Location

Loc Qty

Loc Code

DAS

6
9-89

FP001

41

m133363

41

GA

26

m127813

26

ST007

1500

m134055

1500

ST303

1946

m133769

1946

ST305

97

m130922

97

AN316C4R

Purchased

No

110

Each

77.0000

2

2

AN316C4R

NUT

**

Location

Loc Qty

Loc Code

DAS
6
9-89

ST331

77

m133234

43

m133523

34

MS21042-3

MS21042L3

Purchased

No

110

Each

18.0000

2

2

MS21042-3

Nut / use MS21042L3

**

Location

Loc Qty

Loc Code

FEB 09 2016

ST304

18

M129682

18

DAS
27
9-89

Picklist Print

January 26, 2016 11:18:35 AM

Page 18

Work Order ID: 140955

140955

Parent Item: 646.4001

646 4001

Parent Item Name: AS350 Cable Cutter System

Start Date: 1/26/2016

Required Date: 3/7/2016

Start Qty: 1.00

Required Qty: 1.00

MS27039-08-13

Purchased

No

110

Each

316.0000

2

2

MS27039-08-13

Screw

**

DAS
6
9-89

Location

Loc Qty

Loc Code

ST278

316

124326

316

MS21042-08

MS21042L08

Purchased

No

110

Each

33.0000

2

2

MS21042-08

USE MS21042L08

**

133922

DAS
6
9-89

Location

Loc Qty

Loc Code

ST304

25

122815

25

ST306

8

m130388

8

NAS1149FN832P

Purchased

No

110

Each

3,803.000

4

4

NAS1149FN832P

Washer

**

DAS
6
9-89

Location

Loc Qty

Loc Code

GA

2231

M133316

16

M133769

2215

ST262

1572

M133709

1572

MS24693-C278

Purchased

No

110

Each

70.0000

5

5

MS24693-C278

Screw

**

DAS
27
9-89

Location

Loc Qty

Loc Code

ST287

70

m133998

70

FEB 09 2016
6
9-89

January 26, 2016 11:18:35 AM

Shop Packet Print

Page 18

Picklist Print

January 26, 2016 11:18:35 AM

Page 19

Work Order ID: 140955

140955

Parent Item: 646.4001

646 4001

Parent Item Name: AS350 Cable Cutter System

Start Date: 1/26/2016

Required Date: 3/7/2016

Start Qty: 1.00

Required Qty: 1.00

646.9410

Manufactured No

110

Each

0.0000

1

1

646 9410

Shim

OK
to ship without
mtf
16-3-30

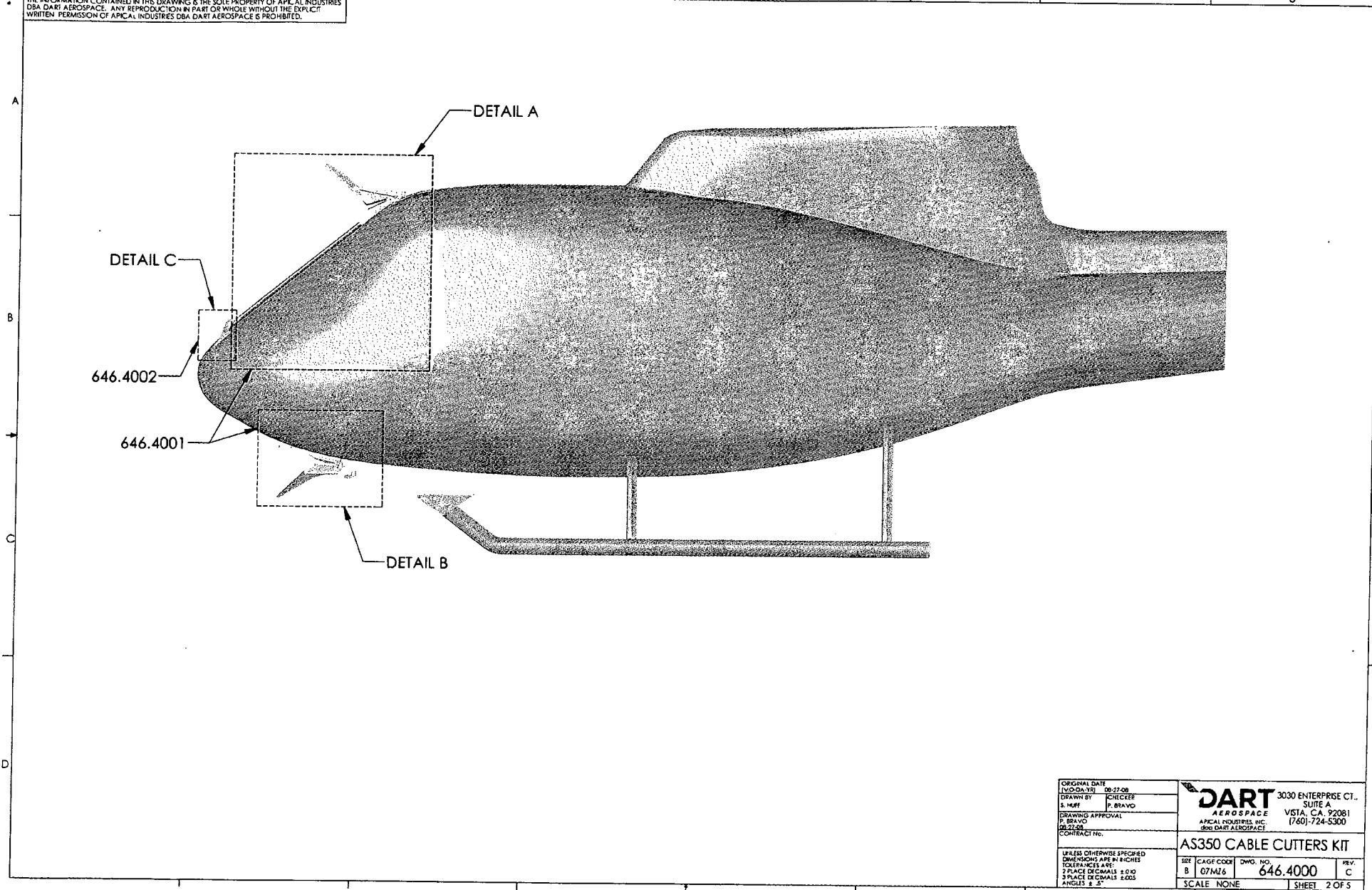
NOTES:

- 20160126 SH 140955

.4006	.4005	.4004	.4003	.4002	.4001	FIND #	PART #	DESCRIPTION	MATL	SPEC
-------	-------	-------	-------	-------	-------	--------	--------	-------------	------	------

QTY		PARTS LIST			
NEXT ASSY (S)	ORIGINAL DATE DUO-DN-171	08-27-08	 3030 ENTERPRISE CT. SUITE A VISTA, CA 92081 (760)-724-5300 AEROSPACE AERIAL INDUSTRIES, INC. 500 DART AEROSPACE		
	DRAWN BY S. HUFF	ENGINEER P. BRAVO			
	DRAWING APPROVAL P. BRAVO				
	DATE OF APPROVAL 08-27-08				
	CONTRACT NO.				
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: 2 PLACE DECIMALS ±.010 3 PLACE DECIMALS ±.005 ANGLES ± .1°		SIZE 6	AS3530 CABLE CUTTERS KIT SER# CAGE CODE DWG. NO. REV. SCALE NONE 1 SHEET 1 OF 5		
			07/21/06 646.040 C		

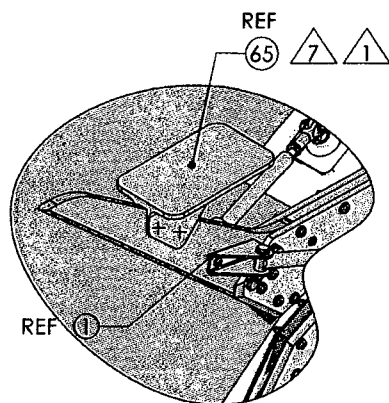
THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF APICAL INDUSTRIES
DBA DART AEROSPACE. ANY REPRODUCTION IN PART OR WHOLE WITHOUT THE EXPLICIT
WRITTEN PERMISSION OF APICAL INDUSTRIES DBA DART AEROSPACE IS PROHIBITED.



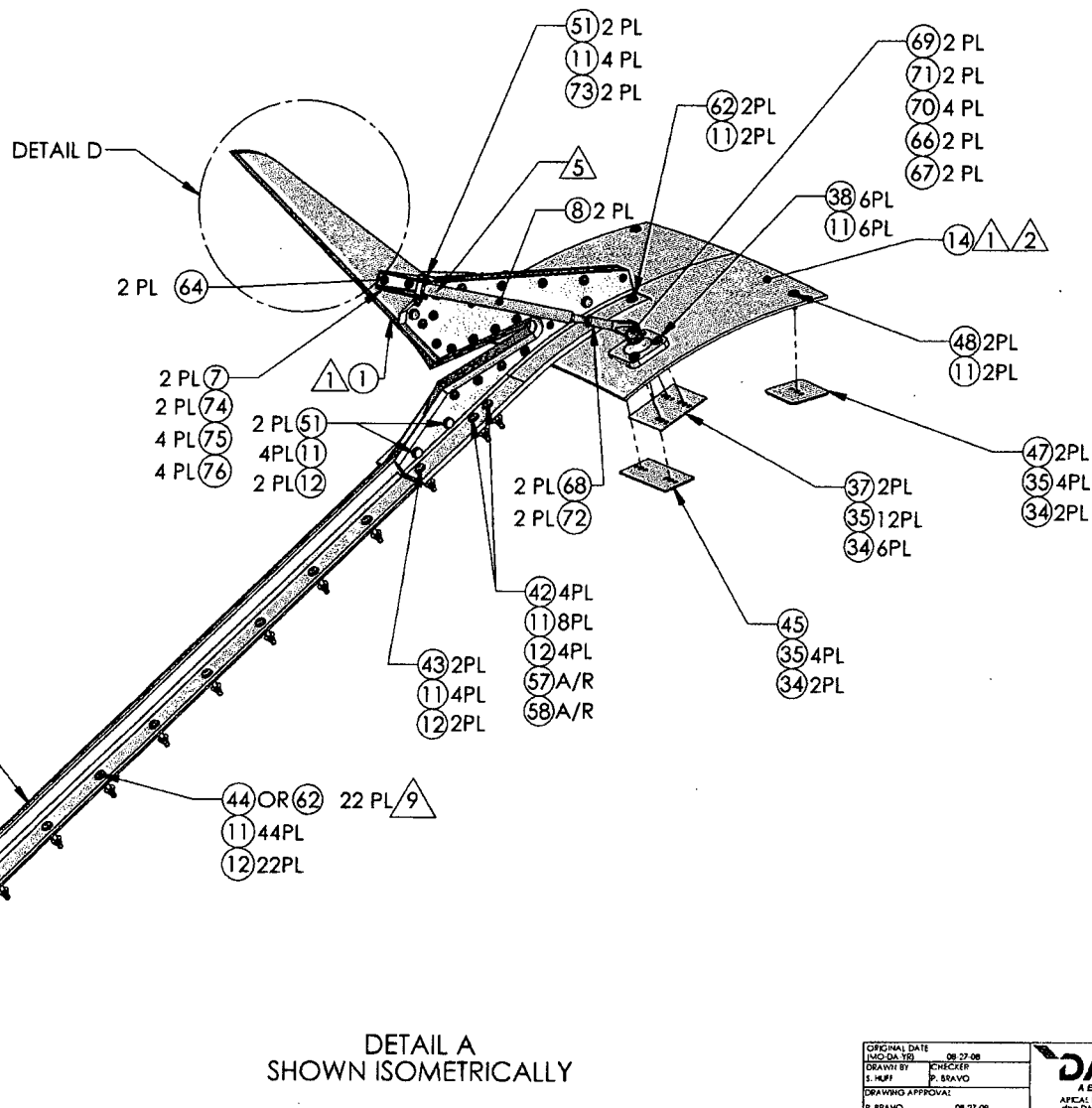
ORIGINAL DATE (YYDDA-YR) 08-27-08		3030 ENTERPRISE CT., SUITE A VISTA, CA. 92081 (760)-724-5300	
DRAWN BY S. HSE		CHECKED P. BRAVO	
DRAWING APPROVAL P. BRAVO		APICAL INDUSTRIES, INC. DBA DART AEROSPACE	
DATE 08-27-08		CONTRACT NO.	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: 2 PLACE DECIMALS ±0.10 3 PLACE DECIMALS ±0.05 ANGLES ±.5°			
SRE B	CAGE CODE 67M16	DWG. NO. 646.4000	REV. C
SCALE NONE			SHEET 2 OF 5

DART
AEROSPACE
AS350 CABLE CUTTERS KIT

THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF APICAL INDUSTRIES DBA DART AEROSPACE. ANY REPRODUCTION IN PART OR WHOLE WITHOUT THE WRITTEN PERMISSION OF APICAL INDUSTRIES DBA DART AEROSPACE IS PROHIBITED.



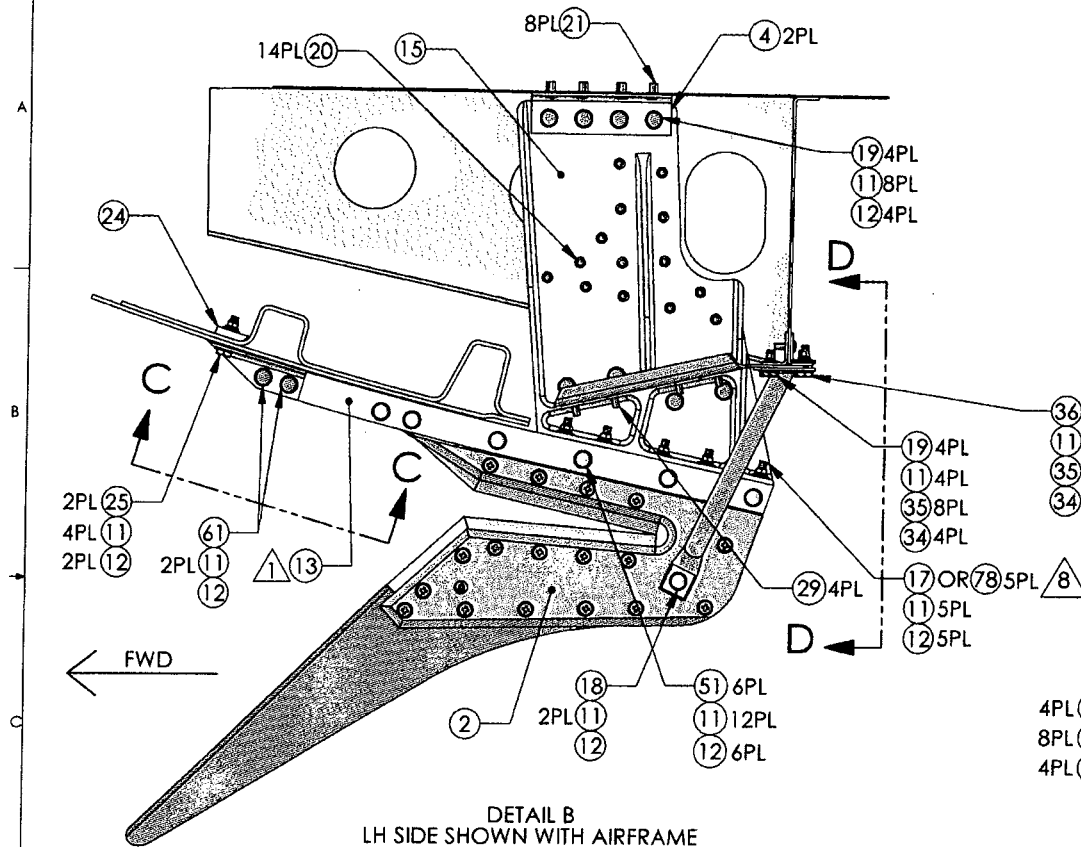
DETAIL D
TYPICAL GPS MOUNT KIT INSTALLATION



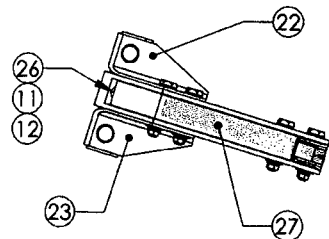
DETAIL A
SHOWN ISOMETRICALLY

ORIGINAL DATE (M-D-Y) 08-27-08 DRAWN BY 1. HAY P. BRAVO DRAWING APPROVAL: P. BRAVO 08-27-08 CONTRACT NO.	 3030 ENTERPRISE CT SUITE A VISTA, CA 92081 (760)-724-5300 AEROSPACE AFICAL INDUSTRIES INC. (SUN DART) LASCO
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: 2 PLACES DECIMALS 1.01 3 PLACES DECIMALS 1.005 ANGLES 1/2	SIZE CAGE CODE DWG. NO. REV C SCALE NONE 07M26 646.4000 3 OF 5 SCALE NONE 1 SHEET 3 OF 5

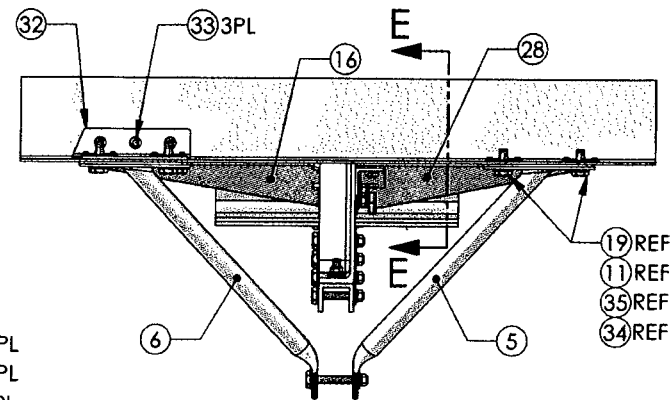
THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF APICAL INDUSTRIES DBA DART AEROSPACE. ANY REPRODUCTION IN PART OR WHOLE WITHOUT THE EXPLICIT WRITTEN PERMISSION OF APICAL INDUSTRIES DBA DART AEROSPACE IS PROHIBITED.



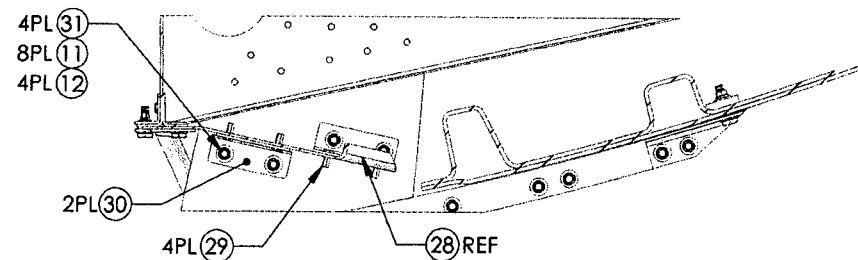
DETAIL B
LH SIDE SHOWN WITH AIRFRAME



SECTION C-C



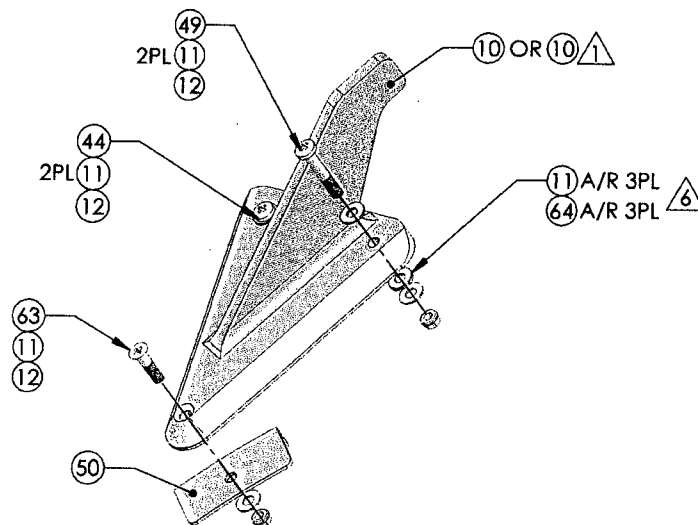
SECTION D-D
CUTTER HIDDEN FOR CLARITY



SECTION E-E

ORIGINAL DATE (MO-DA-YR) 05-27-08		 3030 ENTERPRISE CT. SUITE A VISTA, CA. 92081 (760)-724-5300			
DRAWN BY S. HUFF				P. BRAVO	
DRAWING APPROVAL P. BRAVO				05-27-08	
CONTRACT No		AS350 CABLE CUTTERS KIT			
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE 3 PLACE DECIMALS ±0.03 2 PLACE DECIMALS ±0.05 ANGLES ± .5°					
SHEET B	CAGE CODE 07M26	DWG. NO. 646.4000	REV. C	SCALE NONE	
SHEET 4 OF 5			SHEET 4 OF 5		

THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF APICAL INDUSTRIES
DBA DART AEROSPACE. ANY REPRODUCTION IN PART OR WHOLE WITHOUT THE EXPLICIT
WRITTEN PERMISSION OF APICAL INDUSTRIES DBA DART AEROSPACE IS PROHIBITED.



DETAIL C
LH SHOWN EXPLODED
RH OPPOSITE

ORIGINAL DATE (ADD-DA-YR) 06-27-08		3030 ENTERPRISE CT., SUITE A VISTA, CA. 92081 (760)-724-5300	
DRAWN BY S. HUFF		CHECKER P. BRAVO	
DRAWING APPROVAL P. BRAVO 06-27-08		APICAL INDUSTRIES INC. DBA DART AEROSPACE	
CONTRACT NO.			
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE 2 PLACE DECIMALS ±0.10 3 PLACE DECIMALS ±0.05 ANGLES ±.2			
SIZE B	CAGE CODE 07MZ6	DWG. NO. 646.4000	REV. C
SCALE NONE			SHEET 5 OF 5

UNINCORPORATED ECN(S)

[illegible]

CITY 		PARTS LIST				
NEXT ASSY (S)	URGENT: CALL TODAY: 724-5930	 DART AEROSPACE APCAL INDUSTRIES INC. 2050 WEST HARRISBURG AVE.	3030 ENTERPRISE C1 SUITE A			
	DESIGNED BY: J. C. BRYAN		VISTA, CA 92081			
	S. HUNT		(760)-724-5930			
	FOR MORE INFORMATION CALL					
	FOR MORE INFORMATION CONTACT THE DISTRIBUTOR					
AS350 SCALE CUTTERS KIT						
LISTED COMPONENTS SPECIFIED DIMENSIONS AND REVISIONS TOLERANCES: AS SHOWN SURFACE FINISH: 32 RMS PLATING: 24 HOURS ANGLE: 45°		QTY B	KIT B	CASE CODE 074M6	PRICE \$646.4000	REV C
		SCALE NONE		SHEET 1 OF 5		

UNINCORPORATED ECN(S)

THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF AEROSPACE INDUSTRIES (DIA) DART AEROSPACE, AND REPRODUCTION IN PART OR WHOLE WITHOUT THE EXPRESS WRITTEN PERMISSION OF AEROSPACE INDUSTRIES (DIA) DART AEROSPACE IS PROHIBITED.

NOTES:

1. AFTER INSTALLATION, APPLY F/N 54 A/R TO FILL GAPS AND FILLET EDGES.
2. INSTALL F/N 14 WITH F/N 52 & 53.
3. 3M VHB ADHESIVE TAPE .025" THICK X .50" WIDE
VENDOR: MCMASTER-CARR P/N 75935A651.
4. 3M TAPE PRIMER 94, APPLY TO BOTH SURFACES A/R BEFORE TAPE.
VENDOR: R.S. HUGHES P/N 021200-24216.
5. REUSE FASTENERS FROM F/N 1.
6. USE WASHERS A/R AS SHIMS TO OBTAIN BEST FITMENT.
7. AT CUSTOMERS OPTION, INSTALL F/N 65 BY MATCH DRILLING ON TO F/N 1.
8. INSTALL SHIM IF OEM PROVISIONS ARE INSTALLED ON AIRCRAFT. REMOVE SHIM LAYERS TO ACHIEVE CORRECT SIZE. MATCH DRILL HOLES. USE F/N 78 SCREW IN PLACE OF F/N 17 SCREW.
9. NEWER INSTALLATIONS ON AIRCRAFT WITH UPDATED CANOPY MAY REQUIRE DIFFERENT LENGTH SCREWS. USE F/N 62 TO REPLACE F/N 44 & F/N 26 IN PLACE OF F/N 41 WHEN NECESSARY.

UNINCORPORATED ECN(S)

05304

5	5	5	78	601.3875	SCREW	MS27039-1	
1	1	1	77	646.9410	SHIM	MS27039-1	
	4	4	76	601.2764	WASHER	MS27039-1	
	2	2	75	601.2973	LOCKNUT	MS27039-1	
	2	2	74	601.2988	SCREW	MS27039-1	
	2	2	73	601.2943	LOCKNUT	MS27039-1	
	2	2	72	601.3128	NUT	MS27039-1	
	2	2	71	601.3209	LOCKNUT	MS27039-1	
	4	4	70	601.2638	WASHER	MS27039-1	
	2	2	69	601.2669	BOLT	MS27039-1	
	2	2	68	601.3119	CLEVIS	MS27039-1	
	2	2	67	601.3121	EYE BOLT	MS27039-1	
	2	2	66	650.9201	EYE BRACKET ASSY	MS27039-1	
REF	REF	REF	65	647.5701	GPS MOUNT KIT	MS27039-1	
			2	64	601.3151	WASHER	MS27039-1
		2		63	601.2911	SCREW	MS27039-1
	24	24	62	601.2637	SCREW	MS27039-1	
2	2	2	61	601.2763	BOLT	MS27039-1	
		1	1	60	646.3913	SHIM	MS27039-1
		4	4	59	646.3912	SHIM	MS27039-1
		1	1	58	646.3911	SHIM	MS27039-1
		4	4	57	646.3910	SHIM	MS27039-1
		5	5	56	600.1013	PRIMER	MS27039-1
	8 FT	8 FT	55	600.0129	VHB TAPE	MS27039-1	
	1	1	1	54	600.1012	SEALANT	MS27039-1
		1	1	53	600.0991	MAGNABOND 6398 PART B	MS27039-1
		1	1	52	600.0990	MAGNABOND 6398 PART A	MS27039-1
6	10		10	51	601.2826	BOLT	MS27039-1
		2		50	646.3814	WIPER BRACKET	MS27039-1
		2		49	601.2910	SCREW	MS27039-1
	2		2	48	601.1365	SCREW	MS27039-1
	2		2	47	646.3719	DOUBLER	MS27039-1
		2	2	46	646.3718	CUSTOM WASHER	MS27039-1
	1		1	45	646.3717	DOUBLER	MS27039-1
	22	2	22	44	601.1948	SCREW	MS27039-1
		2	2	43	601.1952	SCREW	MS27039-1
		4	4	42	601.1956	SCREW	MS27039-1
5004	5004	4004	4004	4004	4004	4004	4004
5004	5004	4004	4004	4004	4004	4004	4004
5004	5004	4004	4004	4004	4004	4004	4004
5004	5004	4004	4004	4004	4004	4004	4004
5004	5004	4004	4004	4004	4004	4004	4004
5004	5004	4004	4004	4004	4004	4004	4004
5004	5004	4004	4004	4004	4004	4004	4004
5004	5004	4004	4004	4004	4004	4004	4004
5004	5004	4004	4004	4004	4004	4004	4004
5004	5004	4004	4004	4004	4004	4004	4004
5004	5004	4004	4004	4004	4004	4004	4004
5004	5004	4004	4004	4004	4004	4004	4004
5004	5004	4004	4004	4004	4004	4004	4004
5004	5004	4004	4004	4004	4004	4004	4004
5004	5004	4004	4004	4004	4004	4004	4004
5004	5004	4004	4004	4004	4004	4004	4004
5004	5004	4004	4004	4004	4004	4004	4004
5004	5004	4004	4004	4004	4004	4004	4004
5004	5004	4004	4004	4004	4004	4004	4004
5004	5004	4004	4004	4004	4004	4004	4004
5004	5004	4004	4004	4004	4004	4004	4004
5004	5004	4004	4004	4004	4004	4004	4004
5004	5004	4004	4004	4004	4004	4004	4004
5004	5004	4004	4004	4004	4004	4004	4004
5004	5004	4004	4004	4004	4004	4004	4004
5004	5004	4004	4004	4004	4004	4004	4004
5004	5004	4004	4004	4004	4004	4004	4004
5004	5004	4004	4004	4004	4004	4004	4004
5004	5004	4004	4004	4004	4004	4004	4004
5004	5004	4004	4004	4004	4004	4004	4004
5004	5004	4004	4004	4004	4004	4004	4004
5004	5004	4004	4004	4004	4004	4004	4004
5004	5004	4004	4004	4004	4004	4004	4004
5004	5004	4004	4004	4004	4004	4004	4004
5004	5004	4004	4004	4004	4004	4004	4004
5004	5004	4004	4004	4004	4004	4004	4004
5004	5004	4004	4004	4004	4004	4004	4004
5004	5004	4004	4004	4004	4004	4004	4004
5004	5004	4004	4004	4004	4004	4004	4004
5004	5004	4004	4004	4004	4004	4004	4004
5004	5004	4004	4004	4004	4004	4004	4004
5004	5004	4004	4004	4004	4004	4004	4004
5004	5004	4004	4004	4004	4004	4004	4004
5004	5004	4004	4004	4004	4004	4004	4004
5004	5004	4004	4004	4004	4004	4004	4004
5004	5004	4004	4004	4004	4004	4004	4004
5004	5004	4004	4004	4004	4004	4004	4004
5004	5004	4004	4004	4004	4004	4004	4004
5004	5004	4004	4004	4004	4004	4004	4004
5004	5004	4004	4004	4004	4004	4004	4004
5004	5004	4004	4004	4004	4004	4004	4004
5004	5004	4004	4004	4004	4004	4004	4004
5004	5004	4004	4004	4004	4004	4004	4004
5004	5004	4004	4004	4004	4004	4004	4004
5004	5004	4004	4004	4004	4004	4004	4004
5004	5004	4004	4004	4004	4004	4004	4004
5004	5004	4004	4004	4004	4004	4004	4004
5004	5004	4004	4004	4004	4004	4004	4004
5004	5004	4004	4004	4004	4004	4004	4004
5004	5004	4004	4004	4004	4004	4004	4004
5004	5004	4004	4004	4004	4004	4004	4004
5004	5004	4004	4004	4004	4004	4004	4004
5004	5004	4004	4004	4004	4004	4004	4004
5004	5004	4004	4004	4004	4004	4004	4004
5004	5004	4004	4004	4004	4004	4004	4004
5004	5004	4004	4004	4004	4004	4004	4004
5004	5004	4004	4004	4004	4004	4004	4004
5004	5004	4004	4004	4004	4004	4004	4004
5004	5004	4004	4004	4004	4004	4004	4004
5004	5004	4004	4004	4004	4004	4004	4004
5004	5004	4004	4004	4004	4004	4004	4004
5004	5004	4004	4004	4004	4004	4004	4004
5004	5004	4004	4004	4004	4004	4004	4004
5004	5004	4004	4004	4004	4004	4004	4004
5004	5004						

REV.										DESCRIPTION										DATE										APPROVED									
A										INCORPORATED ECN(S) 0251, 0271 & 0276										01/06/2010										P. BRAVO									
B										INCORPORATED ECN(S) 0251, 0271 & 0276										11/04/2014										P. BRAVO									
C										INCORPORATED ECN(S) 0251										09/09/2015										P. BRAVO									

				2		2	41	601.2829	SCREW		MS24645S4																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																					
--	--	--	--	---	--	---	----	----------	-------	--	-----------	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--